## 1. INTRODUCTION



Cake is a form of sweet food made from flour, sugar, and other ingredients, that is usually baked. In their oldest forms, cakes were modifications of bread, but cakes now cover a wide range of preparations that can be simple or elaborate, and that share features with other desserts such as pastries, meringues, custards, and pies. The most commonly used cake ingredients include flour, sugar, eggs, butter or oil or margarine, a liquid, and leavening agents, such as baking soda or baking powder. Common additional ingredients and flavourings include dried, candied, or fresh fruit, nuts, cocoa, and extracts such as vanilla, with numerous substitutions for the primary ingredients. Cakes can also be filled with fruit preserves, nuts or dessert sauces (like pastry cream), iced with butter cream or other icings, and decorated with marzipan, piped borders, or candied fruit.

Cake is often served as a celebratory dish on ceremonial occasions, such as weddings, anniversaries, and birthdays. There are countless cake recipes; some are bread-like, some are rich and elaborate, and many are centuries old. Cake making is no longer a complicated procedure; while at one time considerable labor went into cake making (particularly the whisking of egg foams), baking equipment and directions have been simplified so that even the most amateur of cooks may bake a cake.

## Classification of Cakes:

There are two main types of cakes: butter cakes (also known as shortened cakes) and Sponge cakes. The distinction between these two broad categories of cake is in the fat content. There are endless variations of each of these major types.

## 1. Sponge Cakes

Sponge cakes have little to no fat, and usually have a larger proportion of egg. This gives them their lighter, airy texture (think angel food and sponge cake). It is important to remember when you are baking sponge cakes that the batter needs to go in the oven as soon as it's ready in order to prevent the egg whites from deflating. They also need to be baked in a tall pan due to the rise the egg whites give them. These cakes are not going to hold up well against heavy frosting, so it's best to give them a light glaze or a dollop of whipped cream.

## 2. Butter Cakes

Butter cakes on the other hand contain butter, margarine, or vegetable shortening, giving you the dense, moist cakes we know and love. if the recipe says "cream butter and sugar," it's a butter cake. Once the creaming is done, you'll typically add egg, flour, and baking powder or baking soda for leavening. Butter cakes can come in chocolate, white, yellow, and marble to name a few. Other cakes in this category may be "shortened" with oil, such as carrot cake or red velvet cake.

Other widely produced varieties of cake include:

## 1. Chiffon Cakes

Chiffon cakes are sponge cakes with vegetable oil, which adds moistness.

## 2. Chocolate Cakes

Chocolate cakes are butter cakes, sponge cakes, or other cakes flavoured with melted chocolate or cocoa powder. German chocolate cake is a variety of chocolate cake. Fudge cakes are chocolate cakes that contain fudge.

## 3. Coffee Cake

Coffee cake is generally a cake to serve with coffee or tea at breakfast or a coffee break. Some types use yeast as a leavening agent while others use baking soda or baking powder. These cakes often have a crumb topping called streusel or a light glaze drizzle.

## 4. Baked Flourless Cakes

Baked flourless cakes include baked cheesecakes and flourless chocolate cakes. Cheesecakes, despite their name, aren't cakes at all. Cheesecakes are custard pies, with a filling made mostly of some form of cheese (often cream cheese, mascarpone, ricotta, or the like), and have very little flour added, although a flour-based or graham cracker crust may be used. Cheesecakes are also very old, with evidence of honeysweetened cakes dating back to ancient Greece.

## 5. Butter or Oil Layer Cakes

Butter or oil layer cakes include most of the traditional cakes used as birthday cakes, etc., and those sold as packaged cakes. Baking powder or bicarbonate of soda is used to provide both lift and a moist texture. Many flavourings and ingredients may be added; examples include devil's food cake, carrot cake, and banana bread.

## 6. Yeast Cakes

Yeast cakes are the oldest and are very similar to yeast bread. Such cakes are often very traditional in form and include such pastries as babka and stollen.

Quality Parameter of Cakes

## 1. Appearance:

The first and foremost thing that attracts anybody is the appearance of the Cake. A Cake should be beautiful and attractive to catch the very first glimpse of every individual present on the floor. Everything that we talk about the Cake comes after the appearance. So, appearance is one of the most important features of a Cake.

## 2. Taste:

You know why everyone loves Cakes? Obviously because of the taste. One of the very basic yet important features of any Cake is its taste. How the Cake tastes and what you feel after having a single bite defines the whole existence of the Cake. A Cake should be enriched in taste and should satisfy you completely.

## 3. Frosting:

Another thing that should be added to the feature list is the frosting of the Cakes. A Cake should be frosted nicely, neither more nor less. Cakes without frosting look boring and tasteless.

## 4. Baking:

A good Cake is the one that's baked with proper steps. The Cake should rise completely and should not look like a batter. It should be fluffy, spongy, and moist. Having fewer ingredients and proper baking methods make the Cake more appealing. Using quality ingredients are always add-ons.

## 5. Flavours:

The most necessary feature of any Cake is its flavour. People are choosy, and Cakes are made for everybody. Chocolate, vanilla, butterscotch, strawberry, and many more flavours are added to serve every taste and flavours are the centres of attraction of any Cake.

This project report focuses on general party cakes sold in various cake shops though a wide range of cakes of different varieties can be produced in same facility using different ingredients and recipes.

## 2. MARKET POTENTIAL:

The global cake market size was valued at USD 42.94 billion in 2019 and is anticipated to grow at a compound annual growth rate (CAGR) of $3.3 \%$ from 2020 to 2027. The high popularity of celebrating various types of special occasions and success through cake cutting is expected to remain a key driving force over the next few years.

Though cakes usually require eggs as a raw material but, in Indian market that can lead shrinking of population of possible customers, thus many player in Indian Cake Market are producing \& selling Eggless Cakes and same goes for Cake, it's safe to say that, it's even more essential for mass produced cake products like Cakes.

Moreover, rising demand for the cakes as desserts post meals during dine-out and weekend parties among millennial and Generation Z consumers across the globe is projected to expand the industry size in the near future. Over the past few years, the trend of celebrating various types of special occasions, success or any festivals, such as birthday, wedding, marriage anniversary, valentine's day, Christmas, pet's birthday, work anniversary, mother's day, and children's day, has been increasing significantly across the globe. Consumers have been increasing spending on purchasing occasion specific cakes, which is expanding the market scope.

Demand for the bakery products is also increasing significantly across the globe as they are instant, accessible, and delicious food in this rapidly urbanizing and changing lifestyles. Europe and North America have enjoyed the strong consumer base of bakery products, including cake, pastry, biscuit, and pita bread.

The market share for innovative as well as healthy products has been rising in the above-mentioned regions as a result of a growing number of healthconscious people at the domestic level. Furthermore, with the rising adoption of western lifestyle and nutrition, demand for different types of cakes is increasing in developing economies of Asia and the Middle East.

The bakery industry has been witnessing new gains owing to changing preferences among consumers toward advanced baked variants. It was estimated that the Asia Pacific accounted for almost half of the global revenue in 2019, which offers huge growth opportunities for the local as well as international bakers to launch new variants, including cakes, Cakes and pastries.

## 3. PRODUCT DESCRIPTION

### 3.1 Product uses \& benefits

Cake is often served as a celebratory dish on ceremonial occasions, such as weddings, anniversaries, and birthdays. There are countless cake recipes; some are bread-like, some are rich and elaborate, and many are centuries old. Cake can provide the entire body, including muscles, brain and nervous system, with a sufficient amount of energy. Cakes containing fruits such as berries, pineapples and apples are a good source of fibre too. Fibre-rich foods can help our body to have a better digestive system. Some cakes are even made with carrot, and carrots contain a lot of fibres as well. Thus, cakes containing all the afore mentioned fruits can help to increase the fiber levels in our body, improve digestion and minimize the risk of heart diseases. Thus, eating cakes can provide you with numerous health benefits and help your body stay fit.

### 3.2 Raw Material

Cakes can have different composition and recipes but let's focus of Pineapple Cake for Example.

## 1. Cake Batter

| Ingredients | Quantity <br> $(\mathbf{g})$ |
| :--- | :---: |
| Baking Powder |  |
| Castor Sugar | 3 |
| Eggs | 170 |
| All Purpose Flour (Maida) | 200 |
| Vanilla Essence | 150 |
| Corn Starch | 4 |
| Oil | 25 |
| RO Water | 40 |

## 2. Whipping Cream

| Ingredients | Quantity <br> $(\mathbf{g})$ |
| :--- | :---: |
|  | 700 |
| Whipping Cream | 50 |
| Icing Sugar |  |

## 3. Decoration, Icing \& Soaking

| Ingredients | Quantity (g) |
| :--- | :---: |
| Pineapple Juice | 150 |
| Chopped Canned Pineapples | 600 |
| Canned Cherry | 30 |

Note: Average Raw material cost per Kg will be Rs. 210-250 (Approx.)

### 3.3 MANUFACTURING PROCESS

The raw materials are procured from vendors as per production requirement and stored in raw material warehouse. All types of raw material are brought from raw material warehouse and fed to their respective holding tanks via appropriate material handling equipments.

All the raw materials for cake batter are introduced in drum of batter mixing machine in required quantity as per required sequence. The mixing speeds for different components are different and are maintained so as to obtain most suitable batter characteristics. The cake batter is thus obtained.

The baking tray is appropriately greased with oil and a butter paper of appropriate shape i.e. shape of the bottom is placed at bottom of the tray. Then the cake batter is poured into baking tray, followed by which batter is appropriately levelled and feed to oven which is already preheated.

The baked cake is obtained from oven, its allowed to cool in pan itself prior to depanning. The butter paper is then gently removed from cake, followed by
which outer skin of cake is also removed with a knife and then the cake is divided into multiple layers depending on thickness of cake. Simultaneously Whipping Cream and Icing Sugar are beaten by a simple beater until sufficiently stiff, which is then fed to holding tank of cake decorating machine.

A layer of cake is placed on caked decorating and icing machine, followed by which the layer is appropriately soaked in pineapple juice, followed by which cake decorating machine is used to quickly spread a layer of whipped cream over the cake, followed by which a layer of chopped pineapples is placed and another layer of cake slice is placed over the pineapple layer.

The same process is repeated until all layer are placed, at last layer only a layer whipping cream is whipped over the cake followed by some quick decorating by the machine and then final finishing manually. The cake is the place in a refrigerator at appropriate temperature, until it's sold.

## 4. PROJECT COMPONENTS

### 4.1 Plant \& Machinery

The process involved is greasing (Cooking), Batter Mixing, Batter Spreading, Baking, Icing, Decoration \& Packaging thus machines required are as follows:

| Name | Item Description | Image |
| :--- | :--- | :--- |
| Batter Mixer | As the name suggests, it's a machine designed <br> form mixing of various ingredients at <br> appropriate speed and torque to maintain the <br> batter characteristic of batter being <br> developed. |  |


| Commercial Oven | An oven is a thermally insulated chamber used for the heating, baking, or drying of a substance and most commonly used for cooking, commercial ovens are simply ovens that can handle large capacity. |  |
| :---: | :---: | :---: |
|  <br> Decorating <br> Machine | $\&$ As the name suggests, this machine is used to decorate the cake with appropriate cream or icing. |  |
| Display Refrigerator | It's a refrigerator designed to store the given product in temperature controlled space with at least one transparent wall, so as to display stored content. |  |
| Cake <br> Decorating <br> Tools | These set of tools are specifically used for decorating cakes and other bakery items with appropriate design with cream, chocolate etc. |  |
| Cake Baking Tools | gThese are general hand tools used for baking and are used excessively in baking of cakes. |  |
| Other Equipments | Several general tools, utensils and equipments are required in any bakery which is essential for operation of bakery and same goes for cake baking unit. |  |

Note: Average Machinery and equipments cost will be Rs. 680000 (Approx.) exclusive of GST \& installation cost.

### 4.2 Power Requirement

The Power requirement would be 8 KW .

### 4.3 Manpower Requirement

7-8 Manpower are required for the Textile recycling unit.
Includes:
2 Skilled Labour
2 Unskilled Labour
2 Administrative Staff
1 Accountant

## 5. FINANCIALS

### 5.1 Cost of Project

| PARTICULARS | AMOUNT | Own <br> Contribution | Bank <br> Finance |
| :---: | :---: | :---: | :---: |
|  |  | 25.00\% | 75.00\% |
| Land \& Building | Owned/rented |  |  |
| Plant \& Machinery | 6.80 | 1.70 | 5.10 |
| Furniture \& Fixtures and Other Assets | 1.00 | 0.25 | 0.75 |
| Working capital | 3.33 | 0.83 | 2.50 |
| Total | 11.13 | 2.78 | 8.35 |

### 5.2 Means of Finance

| PARTICULARS | AMOUNT |
| :--- | :---: |
| Own Contribution | 2.78 |
| Bank Loan | 5.85 |
| Working capital Limit | 2.50 |
| Total | $\mathbf{1 1 . 1 3}$ |

### 5.3 Projected Balance Sheet

| PROJECTED BALANCE SHEET |  |  |  |  | (in Lacs) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1st year | 2nd year | 3rd year | 4th year | 5th year |
| Liabilities |  |  |  |  |  |
| Capital opening balance |  | 3.43 | 4.71 | 6.09 | 7.54 |
| Add:- Own Capital | 2.78 |  |  |  |  |
| Add:- Retained Profit | 1.65 | 2.37 | 3.18 | 4.15 | 4.71 |
| Less:- Drawings | 1.00 | 1.10 | 1.80 | 2.70 | 3.20 |
| Closing Blance | 3.43 | 4.71 | 6.09 | 7.54 | 9.05 |
| Term Loan | 5.20 | 3.90 | 2.60 | 1.30 | - |
| Working Capital Limit | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| Sundry Creditors | 0.59 | 0.66 | 0.74 | 0.83 | 0.92 |
| Provisions \& Other Liab | 0.20 | 0.24 | 0.29 | 0.35 | 0.41 |
| TOTAL : | 11.92 | 12.01 | 12.22 | 12.51 | 12.88 |
| Assets |  |  |  |  |  |
| Fixed Assets (Gross) | 7.80 | 7.80 | 7.80 | 7.80 | 7.80 |
| Gross Dep. | 1.12 | 2.08 | 2.89 | 3.59 | 4.19 |
| Net Fixed Assets | 6.68 | 5.72 | 4.91 | 4.21 | 3.61 |
| Current Assets |  |  |  |  |  |
| Sundry Debtors | 3.33 | 3.78 | 4.23 | 4.72 | 5.25 |
| Stock in Hand | 0.66 | 0.74 | 0.83 | 0.92 | 1.02 |
| Cash and Bank | 1.25 | 1.77 | 2.25 | 2.67 | 3.01 |
| TOTAL: | 11.92 | 12.01 | 12.22 | 12.51 | 12.88 |

### 5.4 Projected Cash Flow

| PROJECTED CASH FLOW STATEMENT |  |  |  | (in Lacs) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1st <br> year | 2nd <br> year | 3rd <br> year | $\begin{gathered} \text { 4th } \\ \text { year } \end{gathered}$ | 5th year |
| SOURCES OF FUND |  |  |  |  |  |
| Own Margin | 2.78 |  |  |  |  |
| Net Profit | 1.65 | 2.37 | 3.18 | 4.15 | 5.23 |
| Depreciation \& Exp. W/off | 1.12 | 0.96 | 0.82 | 0.70 | 0.60 |
| Increase in Cash Credit | 2.50 | - |  |  | - |
| Increase In Term Loan | 5.85 | - |  |  | - |
| Increase in Creditors | 0.59 | 0.08 | 0.08 | 0.09 | 0.09 |
| Increase in Provisions \& Oth lib | 0.20 | 0.04 | 0.05 | 0.06 | 0.07 |
| TOTAL: | 14.69 | 3.45 | 4.13 | 5.00 | 5.99 |
| APPLICATION OF FUND |  |  |  |  |  |
| Increase in Fixed Assets | 7.80 |  |  |  |  |
| Increase in Stock | 0.66 | 0.08 | 0.09 | 0.09 | 0.10 |
| Increase in Debtors | 3.33 | 0.45 | 0.45 | 0.49 | 0.53 |
| Repayment of Term Loan | 0.65 | 1.30 | 1.30 | 1.30 | 1.30 |
| Drawings | 1.00 | 1.10 | 1.80 | 2.70 | 3.20 |
| Taxation | - | - |  |  | 0.52 |
| TOTAL: | 13.44 | 2.93 | 3.64 | 4.58 | 5.65 |

### 5.5 Projected Profitability

| PROJECTED PROFITABILITY STATEMENT |  | (in Lacs) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1st year | 2nd <br> year | 3rd <br> year | $\begin{gathered} \hline \text { 4th } \\ \text { year } \\ \hline \end{gathered}$ | 5th year |
| Capacity Utilisation \% | 70\% | 75\% | 80\% | 85\% | 90\% |
| SALES |  |  |  |  |  |
| Gross Sale |  |  |  |  |  |
| Cake | 33.26 | 37.77 | 42.31 | 47.20 | 52.46 |
| Total | 33.26 | 37.77 | 42.31 | 47.20 | 52.46 |
| COST OF SALES |  |  |  |  |  |
| Raw Material Consumed | 17.64 | 19.89 | 22.27 | 24.89 | 27.65 |
| Electricity Expenses | 1.01 | 1.21 | 1.45 | 1.60 | 1.76 |
| Depreciation | 1.12 | 0.96 | 0.82 | 0.70 | 0.60 |
| Wages \& labour | 4.56 | 5.02 | 5.52 | 6.07 | 6.68 |
| Repair \& maintenance | 0.50 | 0.76 | 0.85 | 0.94 | 1.00 |
| Cost of Production | 24.83 | 27.83 | 30.91 | 34.20 | 37.68 |
| Add: Opening Stock /WIP | - | 0.25 | 0.28 | 0.31 | 0.34 |
| Less: Closing Stock /WIP | 0.25 | 0.28 | 0.31 | 0.34 | 0.38 |
| Cost of Sales | 24.58 | 27.80 | 30.87 | 34.16 | 37.64 |
| GROSS PROFIT | 8.69 | 9.98 | 11.44 | 13.03 | 14.82 |
|  | 26.11\% | 26.41\% | 27.03\% | 27.62\% | 28.25\% |
| Salary to Staff | 4.68 | 5.15 | 5.77 | 6.34 | 6.98 |
| Interest on Term Loan | 0.57 | 0.51 | 0.36 | 0.22 | 0.08 |
| Interest on working Capital | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Rent | 1.20 | 1.32 | 1.45 | 1.60 | 1.76 |


| selling \& Adm exp | 0.33 | 0.38 | 0.42 | 0.47 | 0.52 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL | 7.04 | 7.60 | 8.25 | 8.88 | 9.59 |
| NET PROFIT | 1.65 | 2.37 | 3.18 | 4.15 | 5.23 |
|  | 4.95\% | 6.29\% | 7.52\% | 8.80\% | 9.97\% |
| Taxation | - | - | - | - | 0.52 |
| PROFIT (After Tax) | 1.65 | 2.37 | 3.18 | 4.15 | 4.71 |

### 5.6 Production and Yield

| COMPUTATION OF PRODUCTION OF CAKE |  |  |
| :--- | :--- | :--- |
| Items to be Manufactured |  |  |
| CAKE |  |  |
|  | 8 |  |
| Working hours in a day | 40 | KG |
| Production Per Day | 25 |  |
| No of Working Days in Month | 300 |  |
| No of Working Days in a Year | 12,000 | KG |
| Machine capacity per annum | 12,000 | KG |
| Production per annum |  |  |


| Production of Cake |  |  |
| :--- | ---: | ---: |
| Production | Capacity | KG |
| 1st year | $70 \%$ | 8,400 |
| 2nd year | $75 \%$ | 9,000 |
| 3rd year | $80 \%$ | 9,600 |
| 4th year | $85 \%$ | 10,200 |
| 5th year | $90 \%$ | 10,800 |


| Raw Material Cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Capacity <br> Utilisation | Rate <br> (per Kg) | Amount <br> (Rs. in lacs) |
| 1st year | $70 \%$ | 210.00 | 17.64 |
|  |  |  |  |
| 2nd year | $75 \%$ | 221.00 | 19.89 |
| 3rd year | $80 \%$ | 232.00 | 22.27 |
| 4th year | $85 \%$ | 244.00 | 24.89 |
| 5th year | $90 \%$ | 256.00 | 27.65 |

### 5.7 Sales Revenue

| COMPUTATION OF SALE |  |  |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| Particulars | 1st year | 2nd year | 3rd year | 4th year | 5th year |  |
| Op Stock |  | - | 84 | 90 | 96 | 102 |
| Production | 8,400 | 9,000 | 9,600 | 10,200 | 10,800 |  |
| Less : Closing Stock | 84 | 90 | 96 | 102 | 108 |  |
| Net Sale | 8,316 | 8,994 | 9,594 | 10,194 | 10,794 |  |
| sale price per Kg | 400.00 | 420.00 | 441.00 | 463.00 | 486.00 |  |
| Sales (in Lacs) | 33.26 | 37.77 | 42.31 | 47.20 | 52.46 |  |

### 5.8 Working Capital Assessment

| COMPUTATION OF CLOSING STOCK \& WORKING CAPITAL |  |  |  |  |  |  | (in Lacs) |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| PARTICULARS | 1st <br> year | 2nd <br> year | 3rd <br> year | 4th <br> year | 5th year |  |  |
| Finished Goods | 0.25 | 0.28 | 0.31 | 0.34 | 0.38 |  |  |
|  |  |  |  |  |  |  |  |
| Raw Material | 0.41 | 0.46 | 0.52 | 0.58 | 0.65 |  |  |
| Closing Stock | $\mathbf{0 . 6 6}$ | $\mathbf{0 . 7 4}$ | $\mathbf{0 . 8 3}$ | $\mathbf{0 . 9 2}$ | $\mathbf{1 . 0 2}$ |  |  |


| COMPUTATION OF WORKING CAPITAL REQUIREMENT |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TRADITIONAL METHOD |  |  |  |  |  |  | Amount | Own Margin | Bank Finance |
| Particulars | 0.66 |  |  |  |  |  |  |  |  |
| Finished Goods \& Raw | 0.59 |  |  |  |  |  |  |  |  |
| Material |  |  |  |  |  |  |  |  |  |
| Less: Creditors | 0.07 | $25 \%$ | 0.02 | $75 \%$ |  |  |  |  |  |
| Paid stock | 3.33 | $25 \%$ | 0.83 | $75 \%$ |  |  |  |  |  |
| Sundry Debtors | 3.40 |  | 0.85 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

### 5.9 Power, Salary \& Wages Calculation

| Utility Charges (per month) |  |  |
| :--- | ---: | :--- |
| Particulars | value |  |
| Power connection  Description <br> required   <br> consumption per day 6 KWH <br>  48 units <br> Consumption per month 1,200 units <br> Rate per Unit 10 Rs. <br> power Bill per month 12,000 Rs. |  |  |


| BREAK UP OF LABOUR CHARGES |  |  |  |
| :--- | :--- | :--- | :--- |
| Particulars | Wages <br> Rs. per <br> Month | Employees | Salary |
|  | 11,000 | 2 | 22,000 |
| Skilled (in thousand rupees) <br> Unskilled (in thousand <br> rupees) <br> Total salary per month | 8,000 | 2 | 16,000 |
| Total annual labour charges | (in lacs) |  | $\mathbf{3 8 , 0 0 0}$ |


| BREAK UP OF Staff Salary CHARGES |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :---: | :---: | :---: | :---: |
| Particulars | Salary <br> Rs. per <br> Month | No of | Total |  |  |  |  |
| Accountant | 15,000 | 1 | 15,000 |  |  |  |  |
| Administrative Staffs | 12,000 | 2 | 24,000 |  |  |  |  |
| Total salary per month |  |  | $\mathbf{3 9 , 0 0 0}$ |  |  |  |  |
| Total annual Staff charges | (in lacs) |  | $\mathbf{4 . 6 8}$ |  |  |  |  |

### 5.10 Financial Ratio Analysis

| FINANCIAL INDICATORS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1st year | 2nd year | 3rd year | 4th year | 5th year |
| TURNOVER | 33.26 | 37.77 | 42.31 | 47.20 | 52.46 |
| GROSS PROFIT | 8.69 | 9.98 | 11.44 | 13.03 | 14.82 |
| G.P. RATIO | 26.11\% | 26.41\% | 27.03\% | 27.62\% | 28.25\% |
| NET PROFIT | 1.65 | 2.37 | 3.18 | 4.15 | 5.23 |
| N.P. RATIO | 4.95\% | 6.29\% | 7.52\% | 8.80\% | 9.97\% |
| CURRENT ASSETS | 5.24 | 6.29 | 7.31 | 8.31 | 9.28 |
| CURRENT LIABILITIES | 3.29 | 3.40 | 3.53 | 3.68 | 3.84 |
| CURRENT RATIO | 1.59 | 1.85 | 2.07 | 2.26 | 2.42 |
| TERM LOAN | 5.20 | 3.90 | 2.60 | 1.30 | - |
| TOTAL NET WORTH | 3.43 | 4.71 | 6.09 | 7.54 | 9.05 |
| DEBT/EQUITY | 1.52 | 0.83 | 0.43 | 0.17 | - |
| TOTAL NET WORTH | 3.43 | 4.71 | 6.09 | 7.54 | 9.05 |
| TOTAL OUTSIDE LIABILITIES | 8.49 | 7.30 | 6.13 | 4.98 | 3.84 |
| TOL/TNW | 2.47 | 1.55 | 1.01 | 0.66 | 0.42 |
| PBDIT | 3.59 | 4.09 | 4.61 | 5.32 | 6.16 |
| INTEREST | 0.82 | 0.76 | 0.61 | 0.47 | 0.33 |
| INTEREST COVERAGE |  |  |  |  |  |
| RATIO | 4.35 | 5.40 | 7.52 | 11.31 | 18.81 |


|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WDV | 6.68 | 5.72 | 4.91 | 4.21 | 3.61 |
| TERM LOAN | 5.20 | 3.90 | 2.60 | 1.30 |  |
| FACR | 1.28 | $\mathbf{1 . 4 7}$ | $\mathbf{1 . 8 9}$ | $\mathbf{3 . 2 4}$ | - |

### 5.11 DSCR

CALCULATION OF D.S.C.R

| PARTICULARS | 1st <br> year | 2nd <br> year | 3rd <br> year | 4th <br> year | 5th <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: |
| CASH ACCRUALS |  |  |  |  |  |
| Interest on Term Loan | 2.77 | 3.33 | 4.00 | 4.85 | 5.31 |
| Total | 0.57 | 0.51 | 0.36 | 0.22 | 0.08 |
|  | 3.34 | 3.84 | 4.36 | 5.07 | 5.38 |
| REPAYMENT |  |  |  |  |  |
| Instalment of Term Loan | 0.65 | 1.30 | 1.30 | 1.30 | 1.30 |
| Interest on Term Loan | 0.57 | 0.51 | 0.36 | 0.22 | 0.08 |
|  |  |  |  |  |  |
| Total | 1.22 | 1.81 | 1.66 | 1.52 | 1.38 |
|  |  |  |  |  |  |
| DEBT SERVICE COVERAGE RATIO | $\mathbf{2 . 7 3}$ | $\mathbf{2 . 1 2}$ | $\mathbf{2 . 6 2}$ | $\mathbf{3 . 3 4}$ | $\mathbf{3 . 9 1}$ |
| AVERAGE D.S.C.R. |  |  |  |  | $\mathbf{2 . 9 0}$ |

### 5.12 Depreciation

| COMPUTATION OF DEPRECIATION |  |  | (in Lacs) <br> TOTAL |
| :---: | :---: | :---: | :---: |
| Description | Plant \& Machinery | Furniture |  |
| Rate of Depreciation | 15.00\% | 10.00\% |  |
| Opening Balance | - | - | - |
| Addition | 6.80 | 1.00 | 7.80 |
| Total | 6.80 | 1.00 | 7.80 |
| Less : Depreciation | 1.02 | 0.10 | 1.12 |
| WDV at end of Year | 5.78 | 0.90 | 6.68 |
| Additions During The Year | - | - | - |
| Total | 5.78 | 0.90 | 6.68 |
| Less : Depreciation | 0.87 | 0.09 | 0.96 |
| WDV at end of Year | 4.91 | 0.81 | 5.72 |
| Additions During The Year | - | - | - |
| Total | 4.91 | 0.81 | 5.72 |
| Less : Depreciation | 0.74 | 0.08 | 0.82 |
| WDV at end of Year | 4.18 | 0.73 | 4.91 |
| Additions During The Year | - | - | - |
| Total | 4.18 | 0.73 | 4.91 |
| Less : Depreciation | 0.63 | 0.07 | 0.70 |
| WDV at end of Year | 3.55 | 0.66 | 4.21 |
| Additions During The Year | - | - | - |
| Total | 3.55 | 0.66 | 4.21 |
| Less : Depreciation | 0.53 | 0.07 | 0.60 |
| WDV at end of Year | 3.02 | 0.59 | 3.61 |
| Additions During The Year | - | - | - |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Total | 3.02 | 0.59 | 3.61 |
| Less : Depreciation | 0.45 | 0.06 | 0.51 |
| WDV at end of Year | $\mathbf{2 . 5 6}$ | $\mathbf{0 . 5 3}$ | $\mathbf{3 . 1 0}$ |
| Less : Depreciation | 0.38 | 0.05 | 0.44 |
| WDV at end of Year | $\mathbf{2 . 1 8}$ | $\mathbf{0 . 4 8}$ | $\mathbf{2 . 6 6}$ |
| Less : Depreciation | 0.33 | 0.05 | $\mathbf{0 . 3 7}$ |
| WDV at end of Year | $\mathbf{1 . 8 5}$ | $\mathbf{0 . 4 3}$ | $\mathbf{2 . 2 8}$ |

### 5.13 Repayment schedule

| REPAYMENT SCHEDULE OF TERM LOAN |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Interest | 11.00\% |
| Year | Particulars | Amount | Addition | Total | Interest | Repayment | Closing Balance |
| ist | Opening Balance |  |  |  |  |  |  |
|  | 1st month | - | 5.85 | 5.85 | - | - | 5.85 |
|  | 2nd month | 5.85 | - | 5.85 | 0.05 | - | 5.85 |
|  | 3 rd month | 5.85 | - | 5.85 | 0.05 | - | 5.85 |
|  | 4th month | 5.85 | - | 5.85 | 0.05 |  | 5.85 |
|  | 5th month | 5.85 | - | 5.85 | 0.05 |  | 5.85 |
|  | 6th month | 5.85 | - | 5.85 | 0.05 |  | 5.85 |
|  | 7th month | 5.85 | - | 5.85 | 0.05 | 0.11 | 5.74 |
|  | 8th month | 5.74 | - | 5.74 | 0.05 | 0.11 | 5.63 |
|  | 9th month | 5.63 | - | 5.63 | 0.05 | 0.11 | 5.53 |


|  | 10th month | 5.53 | - | 5.53 | 0.05 | 0.11 | 5.42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11th month | 5.42 | - | 5.42 | 0.05 | 0.11 | 5.31 |
|  | 12th month | 5.31 | - | 5.31 | 0.05 | 0.11 | 5.20 |
|  |  |  |  |  | 0.57 | 0.65 |  |
| 2nd | Opening <br> Balance |  |  |  |  |  |  |
|  | 1st month | 5.20 | - | 5.20 | 0.05 | 0.11 | 5.09 |
|  | 2nd month | 5.09 | - | 5.09 | 0.05 | 0.11 | 4.98 |
|  | 3rd month | 4.98 | - | 4.98 | 0.05 | 0.11 | 4.88 |
|  | 4th month | 4.88 | - | 4.88 | 0.04 | 0.11 | 4.77 |
|  | 5th month | 4.77 | - | 4.77 | 0.04 | 0.11 | 4.66 |
|  | 6th month | 4.66 | - | 4.66 | 0.04 | 0.11 | 4.55 |
|  | 7th month | 4.55 | - | 4.55 | 0.04 | 0.11 | 4.44 |
|  | 8th month | 4.44 | - | 4.44 | 0.04 | 0.11 | 4.33 |
|  | 9th month | 4.33 | - | 4.33 | 0.04 | 0.11 | 4.23 |
|  | 10th month | 4.23 | - | 4.23 | 0.04 | 0.11 | 4.12 |
|  | 11th month | 4.12 | - | 4.12 | 0.04 | 0.11 | 4.01 |
|  | 12th month | 4.01 | - | 4.01 | 0.04 | 0.11 | 3.90 |
|  |  |  |  |  | 0.51 | 1.30 |  |
| 3rd | Opening Balance |  |  |  |  |  |  |
|  | 1st month | 3.90 | - | 3.90 | 0.04 | 0.11 | 3.79 |
|  | 2nd month | 3.79 | - | 3.79 | 0.03 | 0.11 | 3.68 |
|  | 3rd month | 3.68 | - | 3.68 | 0.03 | 0.11 | 3.58 |


|  | 4th month | 3.58 | - | 3.58 | 0.03 | 0.11 | 3.47 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5th month | 3.47 | - | 3.47 | 0.03 | 0.11 | 3.36 |
|  | 6th month | 3.36 | - | 3.36 | 0.03 | 0.11 | 3.25 |
|  | 7th month | 3.25 | - | 3.25 | 0.03 | 0.11 | 3.14 |
|  | 8th month | 3.14 | - | 3.14 | 0.03 | 0.11 | 3.03 |
|  | 9th month | 3.03 | - | 3.03 | 0.03 | 0.11 | 2.93 |
|  | 10th month | 2.93 | - | 2.93 | 0.03 | 0.11 | 2.82 |
|  | 11th month | 2.82 | - | 2.82 | 0.03 | 0.11 | 2.71 |
|  | 12th month | 2.71 | - | 2.71 | 0.02 | 0.11 | 2.60 |
|  |  |  |  |  | 0.36 | 1.30 |  |
| 4th | Opening Balance |  |  |  |  |  |  |
|  | 1st month | 2.60 | - | 2.60 | 0.02 | 0.11 | 2.49 |
|  | 2nd month | 2.49 | - | 2.49 | 0.02 | 0.11 | 2.38 |
|  | 3 rd month | 2.38 | - | 2.38 | 0.02 | 0.11 | 2.28 |
|  | 4th month | 2.28 | - | 2.28 | 0.02 | 0.11 | 2.17 |
|  | 5th month | 2.17 | - | 2.17 | 0.02 | 0.11 | 2.06 |
|  | 6th month | 2.06 | - | 2.06 | 0.02 | 0.11 | 1.95 |
|  | 7th month | 1.95 | - | 1.95 | 0.02 | 0.11 | 1.84 |
|  | 8th month | 1.84 | - | 1.84 | 0.02 | 0.11 | 1.73 |
|  | 9th month | 1.73 | - | 1.73 | 0.02 | 0.11 | 1.63 |
|  | 10th month | 1.63 | - | 1.63 | 0.01 | 0.11 | 1.52 |
|  | 11th month | 1.52 | - | 1.52 | 0.01 | 0.11 | 1.41 |
|  | 12th month | 1.41 | - |  | 0.01 | 0.11 | 1.30 |


| 1.41 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0.22 | 1.30 |  |
| 5thOpening <br> Balance |  |  |  |  |  |  |
| 1st month | 1.30 | - | 1.30 | 0.01 | 0.11 | 1.19 |
| 2nd month | 1.19 | - | 1.19 | 0.01 | 0.11 | 1.08 |
| 3rd month | 1.08 | - | 1.08 | 0.01 | 0.11 | 0.97 |
| 4th month | 0.97 | - | 0.97 | 0.01 | 0.11 | 0.87 |
| 5th month | 0.87 | - | 0.87 | 0.01 | 0.11 | 0.76 |
| 6th month | 0.76 | - | 0.76 | 0.01 | 0.11 | 0.65 |
| 7th month | 0.65 | - | 0.65 | 0.01 | 0.11 | 0.54 |
| 8th month | 0.54 | - | 0.54 | 0.00 | 0.11 | 0.43 |
| 9th month | 0.43 | - | 0.43 | 0.00 | 0.11 | 0.32 |
| 10th month | 0.32 | - | 0.32 | 0.00 | 0.11 | 0.22 |
| 11th month | 0.22 | - | 0.22 | 0.00 | 0.11 | 0.11 |
| 12th month | 0.11 | - | 0.11 | 0.00 | 0.11 | - |
|  |  |  | 0.08 |  | 1.30 |  |
| DOOR TO DOOR | 60 | MONTHS |  |  |  |  |
| MORATORIUM |  |  |  |  |  |  |
| PERIOD | 6 | MONTHS |  |  |  |  |
| REPAYMENT PERIOD | 54 | MONTHS |  |  |  |  |

### 5.14 Break Even Point Analysis

| BREAK EVEN POINT ANALYSIS |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Year | I | II | III | IV | V |
|  |  |  |  |  |  |


| Net Sales \& Other Income | 33.26 | 37.77 | 42.31 | 47.20 | 52.46 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Less: Op. WIP Goods | - | 0.25 | 0.28 | 0.31 | 0.34 |
| Add : CI. WIP Goods | 0.25 | 0.28 | 0.31 | 0.34 | 0.38 |
| Total Sales | 33.51 | 37.80 | 42.34 | 47.23 | 52.49 |
| Variable \& Semi Variable Exp. |  |  |  |  |  |
| Raw Material Consumed | 17.64 | 19.89 | 22.27 | 24.89 | 27.65 |
| Electricity Exp/Coal Consumption at 85\% | 0.86 | 1.03 | 1.23 | 1.36 | 1.49 |
| Wages \& Salary at 60\% | 5.54 | 6.10 | 6.77 | 7.45 | 8.19 |
| Selling \& adminstrative Expenses 80\% | 0.27 | 0.30 | 0.34 | 0.38 | 0.42 |
| Interest on working Capital | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Repair \& maintenance | 0.50 | 0.76 | 0.85 | 0.94 | 1.00 |
| Total Variable \& Semi Variable Exp | 25.06 | 28.32 | 31.71 | 35.26 | 39.00 |
| Contribution | 8.46 | 9.48 | 10.63 | 11.97 | 13.49 |
| Fixed \& Semi Fixed Expenses |  |  |  |  |  |
| Electricity Exp/Coal Consumption at 15\% | 0.15 | 0.18 | 0.22 | 0.24 | 0.26 |
| Wages \& Salary at 40\% | 3.70 | 4.07 | 4.51 | 4.96 | 5.46 |
| Interest on Term Loan | 0.57 | 0.51 | 0.36 | 0.22 | 0.08 |
| Depreciation | 1.12 | 0.96 | 0.82 | 0.70 | 0.60 |
| Selling \& adminstrative Expenses 20\% | 0.07 | 0.08 | 0.08 | 0.09 | 0.10 |
| Rent | 1.20 | 1.32 | 1.45 | 1.60 | 1.76 |
| Total Fixed Expenses | 6.81 | 7.11 | 7.45 | 7.82 | 8.26 |
| Capacity Utilization | 70\% | 75\% | 80\% | 85\% | 90\% |
| OPERATING PROFIT | 1.65 | 2.37 | 3.18 | 4.15 | 5.23 |
| BREAK EVEN POINT | 56\% | 56\% | 56\% | 56\% | 55\% |
| BREAK EVEN SALES | 26.98 | 28.34 | 29.67 | 30.85 | 32.14 |

## 6. LICENSE \& IMPLEMENTATION SCHEDULE

Basic License \& Approvals required in this project:

- Obtain the GST registration.
- Additionally, obtain the Udyog Aadhar registration Number.
- Choice of a Brand Name of the product and secure the name with Trademark if required.
- FSSAI License.


## 7. ASSUMPTIONS

1. Production Capacity of Cake is 40 Kg per day. First year, Capacity has been taken @ 70\%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 7 days and Finished goods Closing Stock has been taken for 3 days.
4. Credit period to Sundry Debtors has been given for 30 days.
5. Credit period by the Sundry Creditors has been provided for 10 days.
6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.
7. Interest on working Capital Loan and Term loan has been taken at $11 \%$.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 6 KW .
10. Selling Prices \& Raw material costing has been increased by 5\% respectively in the subsequent years.
